NE2000*plus*™ Adapter Series

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Quick Installation Guide

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Adapter

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NE2000plus Quick Installation Guide

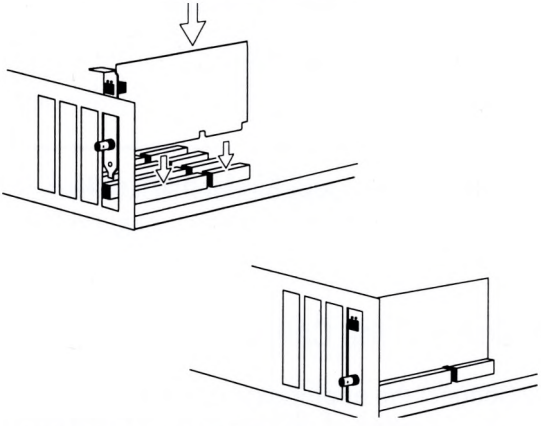
Congratulations! Your new Novell NE2000plus Ethernet interface board provides NetWare compatibility to most ISA or EISA computers.

Installation Overview

1. Insert the board.
2. Run the **PLUSDIAG** configuration program to change the settings if necessary.
3. Connect the cabling.
4. Load the software.
5. Verify the installation.

❖ Insert the Board

1. Put the NE2000plus into any empty expansion slot in the computer.



Careful! The board needs to be securely seated in the slot.

❖ Configure the Board

The NE2000plus comes preconfigured for IRQ 3 and I/O port 300. You only have to change the configuration if these settings will conflict with another device in the computer (for example, an active device on serial port 2 that uses IRQ 3). The NE2000Tplus defaults to 10Base-T (RJ-45 connector) while the NE2000plus and NE2000plus3 default to 10Base-2 (BNC connector).

To change any of the default settings, follow the directions below.

1. Run the **PLUSDIAG** program, located in the directory PLUSDIAG on the NE2000plus diskette, to configure the board.

Base I/O Address	300h (Default), 320h, 340h, 360h, 240h, 280h, 2C0h
Interrupt (IRQ)	2 (9), 3 (Default), 4, 5, 10, 11, 12, 15
Connector	RJ-45 — 10BaseT (NE2000Tplus and NE2000plus3 only) DB15— 10Base5 (NE2000plus and NE2000plus3 only) BNC — 10Base2 (NE2000plus and NE2000plus3 only)
Data Transport Mode	Programmed I/O Mode (Default) Shared Memory Mode
Boot PROM Address	Disabled (Default) Please refer to the *NE2000plus Installation Manual.*

Careful! Do not choose a boot PROM address if you haven't installed an optional boot PROM on the NE2000plus board.

❖ Connect the Cable

1. Connect the appropriate cable based on your selection as defined by the **PLUSDIAG** configuration program.

❖ Load the LAN Driver in a Workstation

To load the LAN driver in a workstation so that it can communicate with a server:

1. Insert the NE2000plus diskette into your computer's floppy drive.
2. At the DOS prompt, type **A:\ <ENTER>**.
3. Go to the subdirectory DOSODI by typing **CD DOSODI <ENTER>.**
4. Load the batch file **LAN.BAT** by typing **LAN.BAT <ENTER>**. This file contains the names and the sequence that the files must be executed.
5. If the NE2000plus's default settings need to be changed, use a DOS editor to specify the new settings in the **NET.CFG** file.

Tip! If you want to set up the workstation to automatically log onto the network (referred to as auto boot login), copy the contents of the DOSODI subdirectory over to a bootable diskette. Then use a DOS editor to insert the **LAN.BAT** file as the last line of your main **AUTOEXEC.BAT** file that's located in your C:\ or A:\ directory.

If you start Windows or other programs from AUTOEXEC, then you should connect to the network by entering **CALL LAN.BAT** before the other program loads in AUTOEXEC.

❖ Load the LAN Drivers in a File Server

The NE2000plus ships with NetWare 4.xx and 2.2 file server drivers. The NetWare 4.xx driver is used for 3.1x and 4.xx installations. The following instructions outline a 3.1x installation and assume that you have an existing 3.1x server, and are installing an additional board.

For a first time installation or additional information, please refer to the NetWare installation manual.

1. Log into the network as supervisor or supervisor equivalent.

2. Copy all **.NLM** files from the 4.xx directory on the diskette into the SYSTEM directory on the network.

3. Copy the **NE2000.LAN** file from the 4.xx directory on the diskette into the SYSTEM directory.

4. At the server system console, type:

   LOAD LSLENH
   LOAD NE2000 MEM=*v* INT=*w* PORT=*x* FRAME=*y*
   BIND IPX TO NE2000 NET=*z*

   where:

   v is the memory address to be used only if using the Shared RAM mode, and is not required in Programmed I/O mode.

   w is the interrupt (IRQ) number of the board as defined in the **PLUSDIAG** configuration program.

   x is the port address defined in the **PLUSDIAG** configuration program.

   y = ETHERNET_802.3
   ETHERNET_802.2
   ETHERNET_SNAP
   ETHERNET_II

   z is the hexadecimal number identifying the network address.

   The **NE2000.LAN** driver will attempt to autoload the **MSM.NLM**. The **MSM.NLM** will not load on a 3.11 server and will subsequently load the **MSM31X.NLM**. After the appropriate **.NLMs** have loaded, the current board settings will appear on the screen. NOTE: For 3.12, do not load LSLENH

5. At the server console, type **LOAD INSTALL <ENTER>**.

   After the NetWare Install Main Menu appears, select **SYSTEM OPTIONS** and choose **Edit the AUTOEXEC.NCF**.

6. Include the command sequence from step 4 in the **AUTOEXEC.NCF** file.

❖ Verify the Installation

1. Now that you have completed the installation, check to see if it was successful.

2. Run the NE2000plus diagnostics (**PLUSDIAG**) to see if the NE2000plus is functioning properly. The following is a sample display of the possible test results.

Auto Test Results

Interrupt Test.	NE2000PLUS Passed Test
I/O Read/Write Test	NE2000PLUS Passed Test
Shared Memory Test	NE2000PLUS Passed Test
Random Access Memory Test	NE2000PLUS Passed Test

Note: The Communication loopback test can be run on the NE2000plus board configured for thin Ethernet by properly terminating the thin connector. The Transfer test requires two workstations. These two tests will not be performed when you run Auto test.

❖ Troubleshooting Installation Problems

If the NE2000plus does not pass the diagnostics, check for network station communication problems.

Possible Causes

- No status link light (only valid with UTP)
- Incorrectly configured NE2000plus board
- Bad cables or segments

Possible Solutions

- Run the **PLUSDIAG** program to verify that the NE2000plus is correctly configured. If necessary, reconfigure the NE2000plus board.
- Check the concentrator for a partitioned or disabled port if using UTP cabling.
- Check and replace cables if necessary.

If you need more information on installing the NE2000plus, please refer to your *NE2000plus Installation Manual.*

Technical Support

Microdyne Technical Support is available from 7 a.m. to 5 p.m. (Pacific Time), Monday through Friday, excluding holidays.

Contact Information

Microdyne Corporation
3601 Eisenhower Avenue
Alexandria, Virginia 22304 U.S.A.

Calling Technical Support

U.S. and Canada:	(800) 255-3967
International:	(703) 960-9661
FAX:	(703) 683-8924

Using the Bulletin Board

Microdyne's BBS supports V.32, V.42 bis, and NMP Level 5. To access the bulletin board, you will need a modem with the settings shown below.

BBS number	(703) 960-9509
Baud Rate:	1200, 2400, 4800, 9600
Parity:	None
Word length:	8-bit
Stop bit:	1

If you have not yet done so, please complete and mail the Product Registration Card shipped with your product. This information helps Microdyne provide timely and accurate warranty support and advise you of new product information as it becomes available.

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